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EPA – New England
Resource Conservation and Recovery Act (RCRA) Corrective Action
Ecological Receptor Exposure Pathway Scoping Checklist

Facility Name: Edelman Leather (Former CEE Associates Facility)
Facility Address: 80 Pickett District Road, New Milford, CT

Facility EPA ID #: CTD044121697

Purpose:

This checklist is designed as a screening tool to help EPA-New England (EPA-NE) RCRA Corrective Action project managers determine whether there is the potential for complete exposure pathways between RCRA facility contaminants and ecological receptors (i.e., plants and wildlife).

Intended Use:

EPA-NE has recognized a need for a tool to guide its review of facility information pertaining to ecological risk assessment. This checklist is intended to guide EPA-NE review of available information on environmental conditions at a facility to determine whether further ecological assessment is necessary. Ideally, the checklist should be completed early in the RCRA Corrective Action process. If complete ecological exposure pathways are identified, an EPA or state ecological risk assessor should be involved in planning subsequent site investigation and ecological risk assessment.

Some state environmental agencies in New England have developed, or are in the process of developing, their own checklists or other tools for scoping ecological exposure pathways. Although EPA-NE believes the use of this checklist may be comparable and complimentary to other existing scoping tools used by states, the format and content of this EPA-NE checklist may differ from such state tools. Accordingly, this checklist is designed primarily for use by EPA-NE RCRA Facility Managers and their agents.

The checklist is considered a public document and, once completed for a given facility, may be included in the facility file. As a public document, the checklist may be shared with states, the regulated community, or the public for informational purposes.

Instructions:

All available relevant/significant information on known and reasonably suspected contaminant releases at or from the facility to soil, groundwater, surface water/sediments should be considered in completing this checklist.

Each page of the checklist includes a series of questions to be answered by the project manager completing the checklist. **In the "rationale and reference" section on each**

page, the project manager should summarize the supporting information used to answer the questions and clearly reference the document, as well as the page number, table number or figure number, where the supporting data can be found. Rationale and references should be clear and specific so that the findings of the checklist are transparent and able to be reproduced. Based on the answers to the questions on each page, the project manager can complete the "Preliminary Ecological Risk Evaluation" section of the checklist.

If the answer to any of the questions in the Preliminary Ecological Risk Evaluation section is "yes", the project manager should consult a U.S. Environmental Protection Agency (EPA) or state ecological risk assessor for further information. In this case, an ecological risk assessor should be involved as early as possible in planning the site investigation and further ecological risk assessment. If the answer is "no" to all three findings in the Preliminary Ecological Risk Evaluation section, complete pathways for contaminant exposure to ecological receptors are not reasonably expected at the facility, based on the data used in completing the checklist. Following its completion, the checklist should be included in the facility file to document the rationale for consulting an ecological risk assessor and focusing any subsequent ecological risk assessment, or the rationale for not proceeding further with ecological risk assessment.

Note. Please be advised that new data or new information could alter the findings of this checklist. The checklist should be revisited if new information that might change the checklist findings becomes available. Completion of this checklist is not intended to substitute for a Screening Level Ecological Risk Assessment (SLERA) or a Baseline Ecological Risk Assessment (BERA). Findings, documented by this checklist that ecological exposure to facility contaminants is not expected, are not considered final until a site-wide remedy decision made by EPA or a state environmental agency authorized for RCRA Corrective Action results in the termination of interim status of a facility or satisfaction with the conditions of a hazardous waste operating or post-closure permit

REVIEW OF FACILITY INFORMATION & CONCEPTUAL SITE MODEL

In order for ecological risks to exist there must be a potential for exposure of ecological receptors to contaminants. This portion of the evaluation is designed to assist in the identification of contaminated environmental media associated with a site.

Based on a review of the file and an understanding of the conceptual site model for the facility, please identify the environmental media present on or adjacent to the facility property which are known or reasonably expected to be impacted by contaminants from the facility. Place a check mark next to the media type. Additionally, please evaluate the potential for migration of contaminants from the site. Potential migration pathways include surface water flow, run off, groundwater flow, erosion, placement of fill and discharge locations. Please attach a figure of the site showing areas of potential contamination.

Media Potentially Affected by Facility Operations:		**Potential for Migration**	**Migration Pathways**
X	Soil	Yes__/No **X**	_____
_____	Sediment	Yes__/No__	_____
_____	Surface Water	Yes__/No__	_____
X	Ground Water	Yes **X**/No__	**Migration of overburden groundwater**

Rationale and References: (Please clearly reference the document name and date as well as the page, table or figure number where any data considered in answering the above questions can be found)

Soil – Residual petroleum and chlorinated VOC-affected soils were identified beneath the former hazardous waste storage area, as described in the June 2002 *Summary Report and Phase III Work Plan*, pages 2-15 through 2-18 (see attached). Migration/exposure is not anticipated, as the soils are located beneath existing structures, and an environmental land use restriction (ELUR) is being prepared to impose certain restrictions and prevent disturbance of the overlying structures.

Groundwater – overburden groundwater has been documented to have been affected by chlorinated VOCs. The present condition of the groundwater is summarized on pages 8 – 14 of the 2008 *Annual Report Status of Remediation* (see attached). The affected groundwater (located primarily in the deep overburden)has reached an adjacent parcel.

The attached Figures provide a description of the Site Areas of Concern (AOCs), as well as the general outline of the groundwater plume on-site.

HABITAT DOCUMENTATION

In order for ecological risks to exist there must be a potential for ecological receptors to come into contact with contaminated media. This portion of the evaluation is designed to assist in the identification of potential presence of environmental receptors associated with a site. It is predicated upon the assumption that if suitable habitat exists, then ecological receptors could potentially be present.

Please check the potentially impacted habitats present on, adjacent to, or immediately downgradient of the facility based on a site visit and an understanding of the site conceptual model. Also, indicate for each habitat whether the presence of site-derived contamination has been confirmed, is suspected, is not expected, or is unknown

Table 1: Summary of habitats and presence of Site-derived contamination

Habitat type	Location			Presence of Site-derived contamination			
	At the site[a]	Adjacent to the site[b]	Not present	Con-firmed	Sus-pected	Not expected	Unknown
MARINE/ESTUARINE ENVIRONMENTS							
Salt marsh			X			X	
Tidal rivers & streams			X			X	
Exposed mudflats			X			X	
Seagrass beds			X			X	
Rocky shoreline			X			X	
Other*			X			X	
FRESHWATER ENVIRONMENTS							
Wetlands			X			X	
Lakes & ponds			X			X	
Rivers and streams		X				X	
Vernal pools[c]			X			X	
Other*			X			X	
TERRESTRIAL ENVIRONMENTS							
Wooded			X			X	
Transitional			X			X	
Open field		X				X	
Other*			X			X	

[a] "at the site" is defined as within the limits of the site perimeter or site fence
[b] "adjacent to the site" is more loosely defined as terrestrial or aquatic habitat present in the immediate vicinity of the site
[c] "vernal pool" refers to a temporary body of standing water often located in terrestrial habitat which appears in early spring but completely dries out by late spring-early summer. This type of habitat can be suitable and is critical for, among other things, amphibian reproduction.
* provide additional details

Habitat Documentation Rationale and References: (Please clearly reference the document name and date as well as the page, table or figure number where any data considered in answering the above questions can be found.)

The general setting for the Site is presented in Section 1.2 of the 2008 *Annual Report of the Status of Remediation.* Figure 1 to the report shows that no marine/estuarine environments, wetlands, lakes and ponds, or vernal pools exist on or adjacent to the Site. Figure 1 also identifies the Housatonic River approximately 1,000 feet east of the Site.

Figure 2 of that report shows that the majority of the Site is building or paved parking, with only minor wooded areas on the property perimeter (see attached).

The report also notes that the adjacent down-gradient property is an open field (pages 10 – 12, see attached).

EXPOSURE ASSESSMENT

In order for there to be a potential for ecological risks to occur at a site, there must be a potential for stressors, in this case chemicals, to be present where ecological receptors could come in contact with them. After reviewing the previous pages on Facility Information and Habitat Documentation, plus additional facility information as necessary, please answer the following questions in order to determine if ecological receptors are known or could reasonably be expected to be exposed to contaminants at or from the facility. **If any contaminant concentration data showing non-detect results are used to conclude that an environmental medium is not contaminated, please consult an ecological risk assessor to confirm that analytical methods used were adequate to detect contaminants at concentrations below levels of concern for ecological receptors. In addition, contaminants that have the potential to bioaccumulate cannot be eliminated from further consideration through the use of this checklist. Bioaccumulating contaminants must be carried through the ecological risk assessment.**

Surface Water Bodies

Sediments

1 a. Is sediment in surface water bodies known or reasonably expected to be contaminated due to releases at or from the facility? Releases from a facility may include but are not limited to: point source discharges, run-off from contaminated soil, groundwater migration, erosion, filling or aerial deposition resulting from air emissions. **Note: If sediment samples are taken adjacent to or downstream of the site, collection should take place in depositional areas present.**

Yes__ (Complete the remaining questions in this checklist and circle "Yes" in Surface Water Body Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

No_X (Proceed to question 1b.)

Surface Water

1b. Is surface water known or reasonably expected to be contaminated due to releases at or from the facility? Releases from a facility may include but are not limited to: point source discharges, run-off from contaminated soil, discharge of contaminated groundwater, groundwater migration or aerial deposition resulting from air emissions. (Note: for surface water, dissolved metal data, from analysis of filtered water samples, is a better indicator of exposure than total metal data).

Yes__ (Complete the remaining questions in this checklist and circle "Yes" in Surface Water Body Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

No_X (Proceed to question 1c.)

Groundwater

1 c. For groundwater discharging to surface water, is groundwater, at the point of discharge to the surface water body, known or reasonably suspected to be contaminated due to releases at or from the facility? Note: Because of the ability of certain sediments to accumulate contaminants, the need for sediment sampling in a water body should not be ruled out based on concentrations of suspected site related contaminants found to be below ecologically based ambient surface water quality criteria in groundwater which intersects surface water bodies.

Yes__ (Complete the Surface Water Bodies Rationale and References section and the remaining questions in this checklist. Then, circle "Yes" in the Surface Water Body Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

No_X (Complete the Surface Water Bodies Rationale and References section directly below, then proceed to the Surface Soil Section below.)

Surface Water Bodies Rationale and References: (Please summarize the rationale for the answers provided in the "Surface Water Bodies" section above. Please clearly reference the document name and date as well as the page, table or figure number where any data considered in answering the above questions can be found. In addition, please discuss any site specific information, not specifically prompted by the question(s) above, that would help to clarify and/or qualify the finding.) Please add additional pages as necessary.

There is no direct surface water discharge from the Site to any water body (see Figure 1, discussed above).

As reported in the 2008 *Annual Report of the Status of Remediation*, Section 2.2, and Table 1 of the *Historical Summary of Site Groundwater Data*, groundwater leaving the Site does not exceed the CT DEP surface water protection criteria (SWPC) for any parameter. No risk to off-site water bodies is therefore indicated.

Surface Soil

2 a. Is surface soil (found at depths of 2 feet or less from the surface) known or reasonably expected to be contaminated due to releases at or from the facility?

Yes__ (Proceed to question 2 b.)
No_X (Complete the Surface Soil Rationale and References section and the remaining questions in this checklist, then circle "No" under Surface Soil Finding in the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

2 b. Is all contaminated surface soil covered with buildings, pavement or other physical barriers that prevent plants or wildlife from being exposed to contaminants and that prevent migration of soil contamination into groundwater that could affect a surface water body?

Yes___ (Proceed to question 2 c.)
No__ (Complete the Surface Soil Rationale and References section below and the remaining questions in this checklist, then circle "Yes" under Surface Soil Finding in the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

2 c. Is an institutional control in place to ensure the maintenance of the barriers described above so that receptors will not be exposed to contaminated soil (i.e., ensuring that soil will not be exposed as a result of excavation, demolition or other activities and that pavement or other physical barriers will be maintained in good condition and that if soil is exposed, appropriate measures will be taken to address any ecological risks).

Yes____ (After completing the Surface Soil Rationale and References section below and the remaining questions in this checklist, circle "No" under Surface Soil Finding in the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)
No__ (After completing the Surface Soil Rationale and References section below, and the remaining questions in this checklist, circle "Yes" under Surface Soil Finding in the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

Surface Soil Rationale and References: (Please summarize the rationale for the answers above. Please clearly reference the document name and date as well as the page, table or figure number where any data considered in answering the above questions can be found. In addition, please discuss any site specific information, not specifically prompted by the question(s) above, that would help to clarify and/or qualify the finding. Please add

additional pages as necessary.)

The Site investigation efforts summarized in the June 2002 *Summary Report and Phase III Work Plan*, indicate that no surface soil samples contain target parameters above the CT DEP's residential direct exposure criteria (RDEC) and/or GB pollutant mobility criteria (PMC). Soil data was presented on an AOC by AOC basis in summary tables in that report (see attached).

Subsurface Soil

3 a. Is subsurface soil (found at depths greater than 2 feet from the surface) known or reasonably expected to be contaminated due to releases at or from the facility?

Yes X (Proceed to question 3 b.)
No__ (Skip to the Subsurface Soil Rationale and References section. Then complete the remaining questions in this checklist and circle "No" under Subsurface Soil Finding in the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

3 b. Are the contaminated subsurface soils located in a setting where they could be exposed by erosion or that subsurface soil contaminants could be mobilized and transported via groundwater to a surface water body?

Yes__ (After completing the Subsurface Soil Rationale and References Section and the remaining questions in this checklist, circle "Yes" under Subsurface Soil Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below).
No X engineering controls are in place. (Proceed to question 3c)

3 c. Is an institutional control in place to effectively ensure that contaminated soil will not be brought to the surface, as a result of excavation, demolition or other activities and, if applicable, to ensure that engineering controls are maintained and that if contaminated soil is exposed, appropriate measures will be taken to address ecological risk?

Yes X (After completing the Subsurface Soil Rationale and References Section and the remaining questions in this checklist, circle "No" under Subsurface Soil Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)
No__ (After completing the Subsurface Soil Rationale and References Section and the remaining questions in this checklist, circle "Yes" under Subsurface Soil Finding under the PRELIMINARY ECOLOGICAL RISK EVALUATION Section below.)

Subsurface Soil Rationale and References: (Please summarize the rationale for the answers above. Please clearly reference the document name and date as well as the page, table or figure number where any data considered in answering the above questions can be found. In addition, please discuss any site specific information, not specifically prompted by the question(s) above, that would help to clarify and/or qualify the finding. Please add additional pages as necessary.)

The Site investigation efforts summarized in the June 2002 *Summary Report and Phase III Work Plan*, indicated that certain subsurface soil samples contain target parameters above CT DEP's RDEC and/or GB PMC. Soil data was presented on an AOC by AOC basis in summary tables included in that report.

From that report, it is clear that all of the affected subsurface soils are located beneath existing structures and/or pavement, thus minimizing the potential for contaminant mobilization due to infiltrating precipitation. Further, an ELUR is being prepared to be placed on specific AOCs to impose restrictions on, and prevent disturbance of, the overlying structures.

Finally, a remediation system is presently active on the Site, treating both overburden soil and groundwater. This air sparge/soil vapor extraction system has removed over 400 pounds of combined VOCs to date. This system provides a temporary engineering control for the residual VOCs in the overburden soils. Once remediation is complete, the system will cease operation.

PRELIMINARY ECOLOGICAL RISK EVALUATION

Surface Water Body Finding:
Based on the information provided above, is further evaluation of risks to ecological receptors from contaminants in surface water or sediments of surface water bodies necessary?

Yes__ (Check "Yes" if the response to any of the questions above regarding Surface Water Bodies is "Yes")

No_X (Check "No" if the response to all of the questions above (1a, 1b, and 1c) regarding Surface Water Bodies is "No")

Surface Soil Finding:
Based on the information provided above, is further evaluation of risks to ecological receptors from contaminants in surface soil necessary?

Yes __

No_X_

Subsurface Soil Finding: Based on the information provided above, is further evaluation of risks to ecological receptors from contaminants in subsurface soil necessary?

Yes__

No_X_

Based on the information provided on the preceding pages, check the appropriate response:

_X_ The answer was "No" for all three of the findings in this checklist (i.e., the Surface Water Body Finding, the Surface Soil Finding and the Subsurface Soil Finding). Therefore, based on the data considered in this checklist, ecological exposure to contaminants at or from the **Edelman Leather (Former CEE Associates** facility , EPA ID # **CTD044121697** , located at (street address) **80 Pickett District Road** in (town and state) **New Milford, CT** is not reasonably expected and further ecological risk assessment does not appear necessary. **Please ensure that supporting information used to answer the questions in this checklist is summarized in the "rationale and reference" section on each page. Please also list the document title, as well as the page number, table number or figure number, where the supporting data can be found. Rationale and references should be clear and specific so that the findings of the checklist are transparent and able to be reproduced.**
Note: **Releases from the facility must be adequately characterized, in accordance with EPA guidance, in order to make this determination. This checklist should be revisited if new information, that would alter the checklist findings, becomes available. In addition, the finding that ecological exposure to facility contaminants is not expected is not considered final until a site-wide remedy decision made by EPA or a state environmental agency authorized for RCRA Corrective Action results in the termination of interim status of a facility or satisfaction with the conditions of a hazardous waste operating or post-closure permit.**

_____ The answer was "Yes" for any of the findings in this checklist (i.e., the Surface Water Body Finding, the Surface Soil Finding and the Subsurface Soil Finding). Therefore, further evaluation of ecological risk is recommended for the _____ facility, EPA ID #_____, located at (street address) _____ in (town and state)_____.
An EPA or state ecological risk assessor should be involved as early as possible in planning the facility investigation. This checklist can be provided to the ecological risk assessor to focus the ecological risk assessment on the potential exposure pathways.

Completed by: (signature) _____
Date April 6 2009
(printed name) Robert J. Drake, PE, Ph.D., LEP
(title) Senior Project Manager

Locations where References may be found:
2008 *Annual Report of the Status of Remediation* – EPA Files (Portions attached)
June 2002 *Summary Report and Phase III Work Plan* – CT DEP Files (Portions attached)